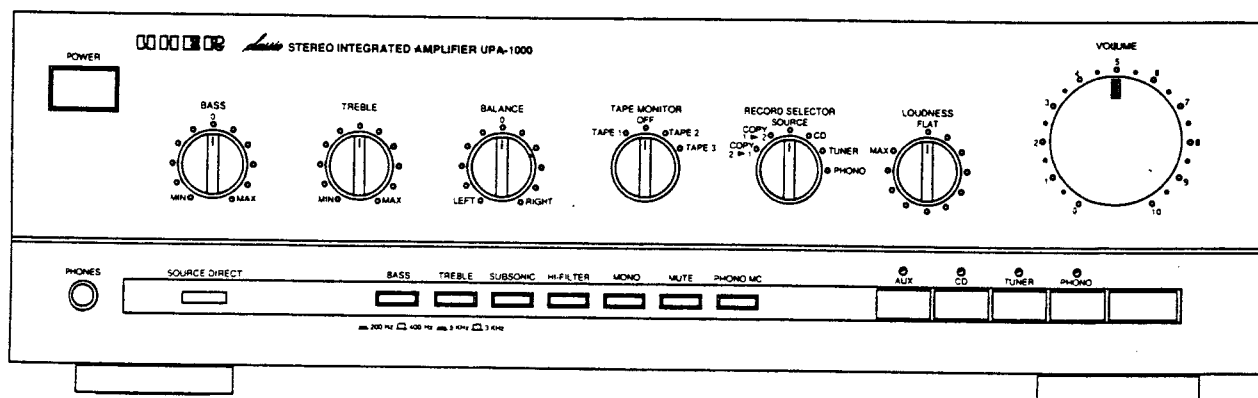


SERVICE MANUAL

UPA-1000

PRE AMPLIFIER



SPECIFICATIONS

● Amplifier Section

Input sensitivity impedance

Phono MC.....0.22mV / 100

Phono MM.....2.5mV / 47k

Tuner,CD,AUX Tape.....150mV / 47k

Frequency response (high level inputs,-3dB)

.....5-90000Hz

Linearity (20Hz-20000Hz).....+ / -0,5dB

Signal to noise potential ratio (UA=1V, A valued),

Phono MC.....75dB

Phono MM.....85dB

Tuner, CD,AUX,Tape.....100dB

Saturation resistivity

Phono MC.....15mV

Phono MM.....180mV

Tuner, CD,AUX,Tape.....12V

Total non-linear distorsion factor (1 kHz).....0.01%

Tone Control

Bass 50Hz ☐ (Turnover OFF)+ / +10dB

Treble 10Hz ☐+ / -10dB

Bass 20Hz ☐ (Turnover ON)+ / -10dB

Treble 20Hz ☐+ / -10dB

Loudness

100Hz.....+10dB

10KHz.....+4dB

Filters

Subsonic.....-18dB / oct,(20Hz)

High.....-12dB / oct,(10Hz)

● Miscellaneous

POWER requirements.....AC230V,50Hz

POWER consumption.....18W

Dimensions (W×H×D heigh without footing)

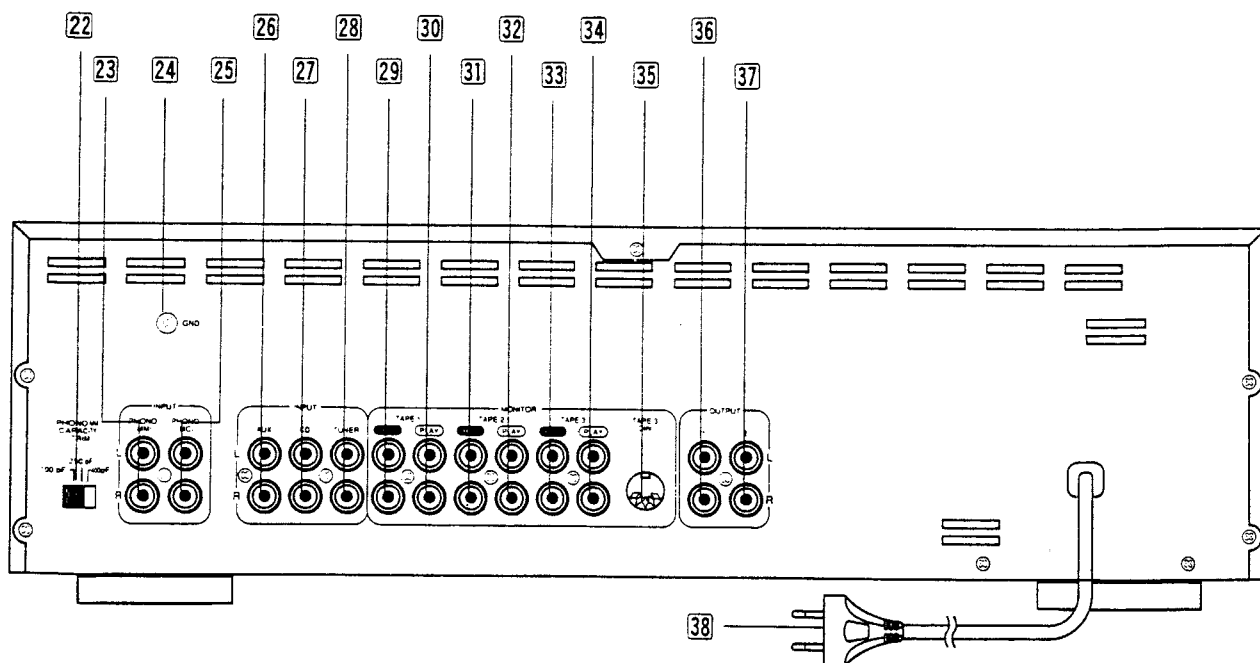
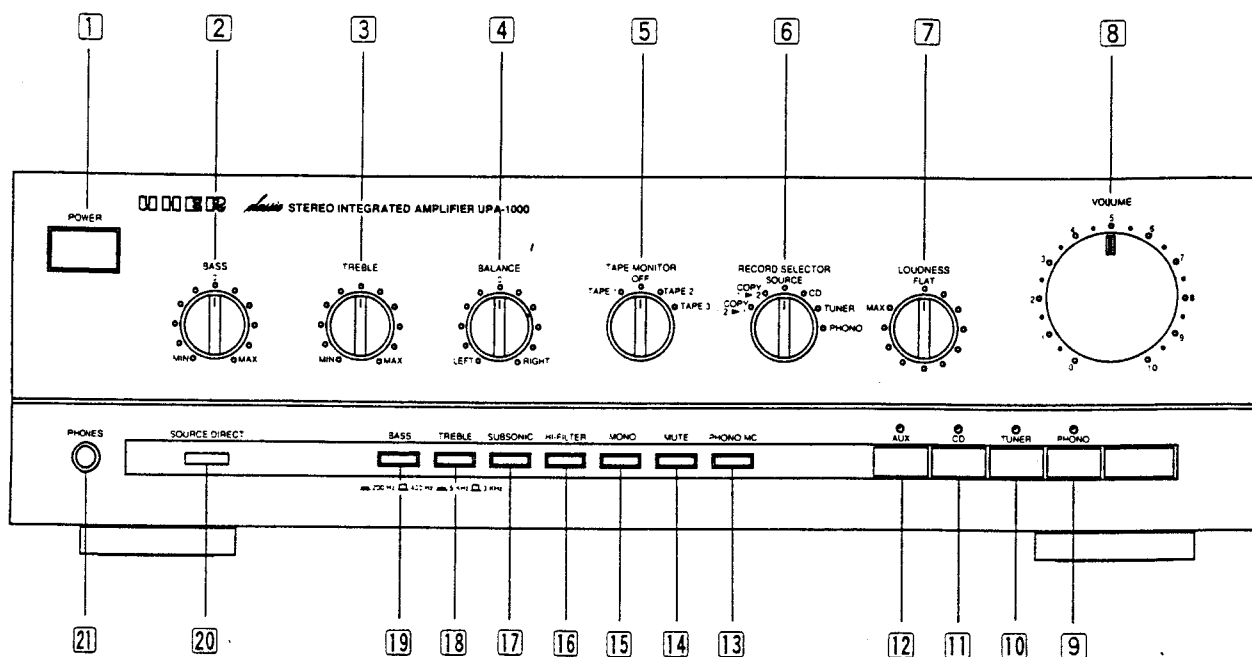
.....435 × 120 × 250mm

Weight(net).....4.1kg

● Furnished parts

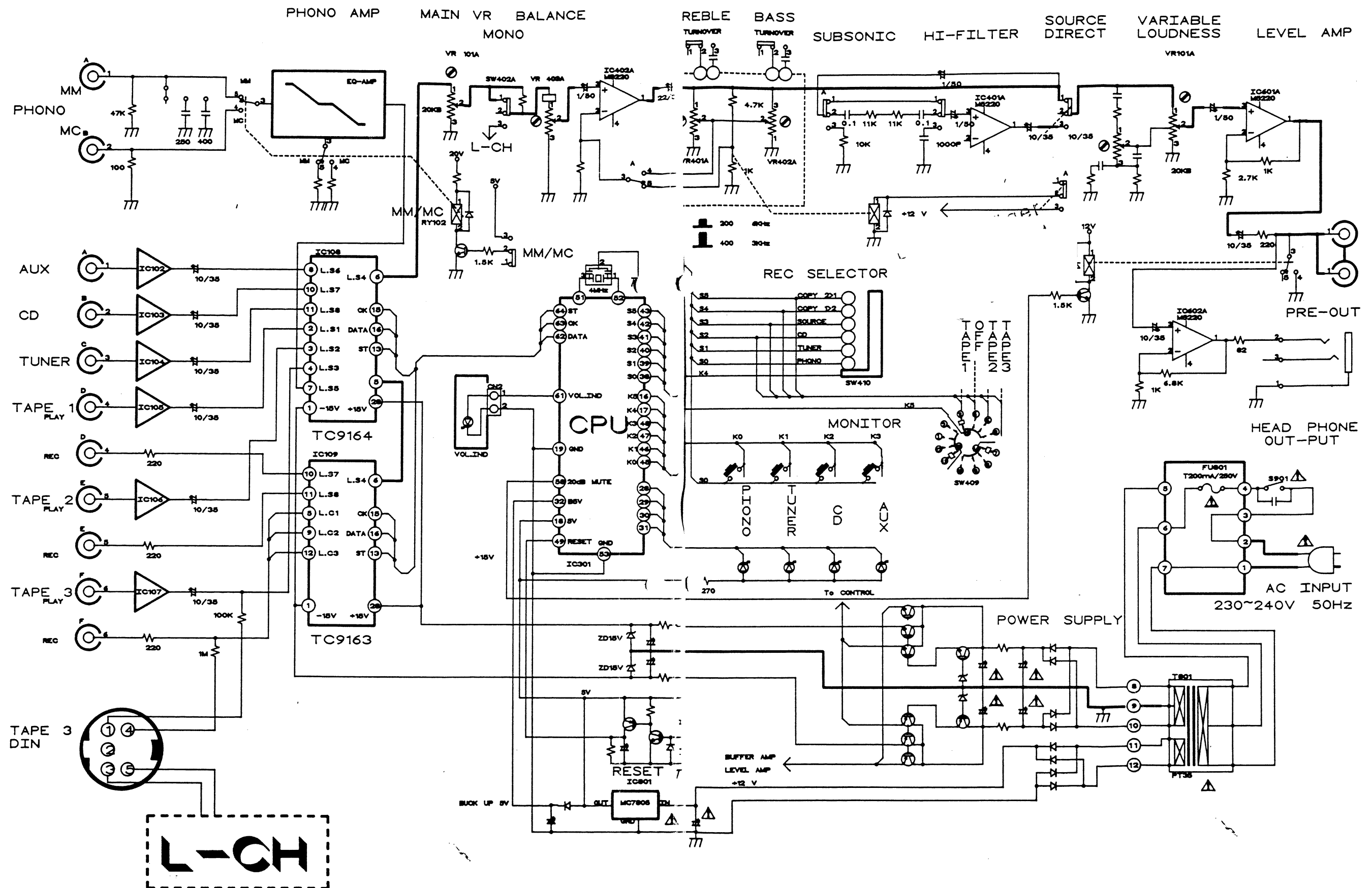
operation instructions.....1

FRONT PANEL FEATURES

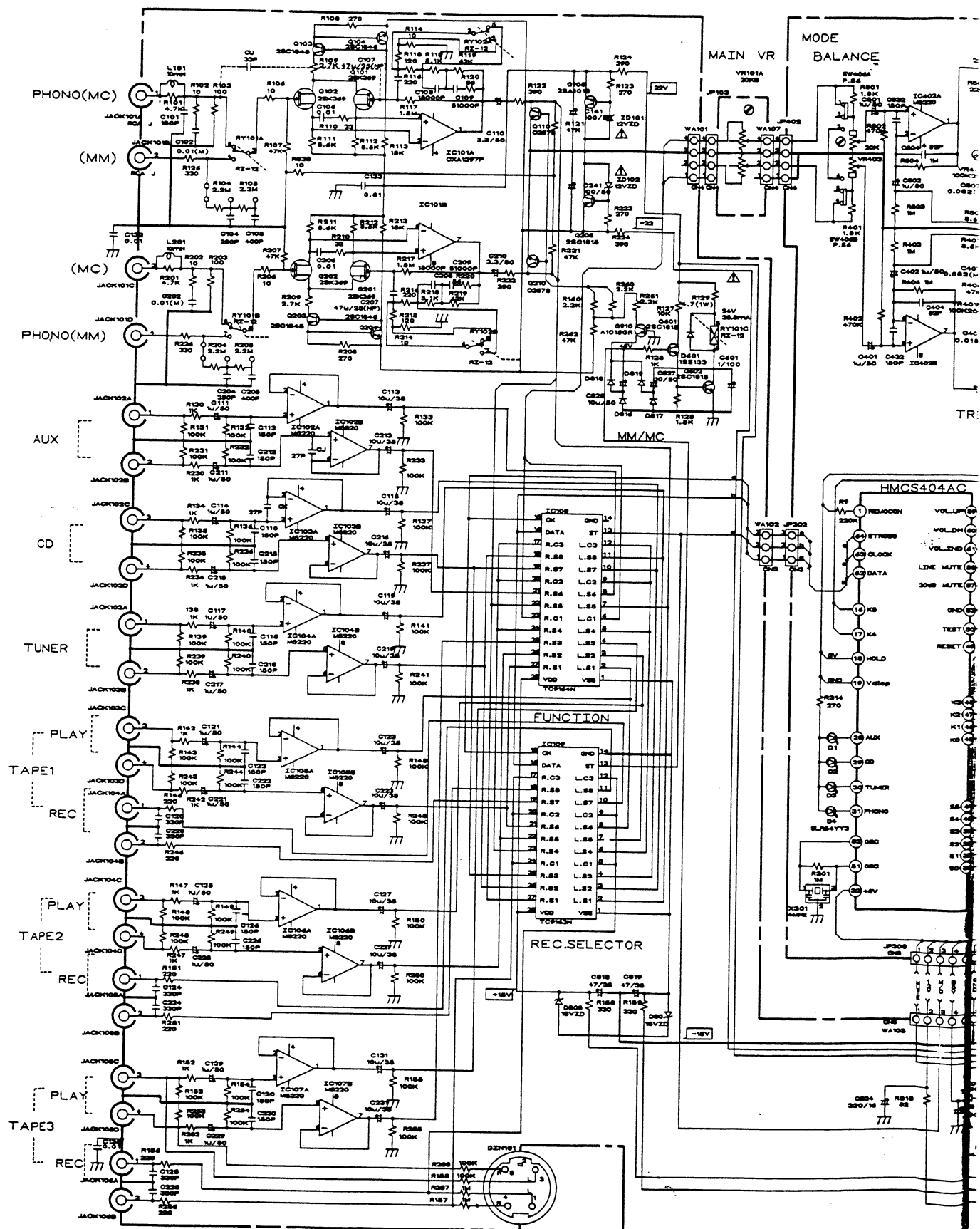


Designation	INSCRIPTION
1. Mains key	POWER
With this key you switch the unit on or off.	
2. Bass control	BASS
With this control you set the proportion of low frequencies.	
3. Treble control	TREBLE
With this control you set the proportion of high frequencies.	
4. Balance control	BALANCE
With this control you set the volume ratio between the two stereo channels.	
5. Monitor switch	TAPE MONITOR
With this switch you determine from which tape device you want to replay.	
6. Recording selector switch	RECORD SELECTOR
With this selector switch you determine which program source you want to record.	
7. Control for aurally compensated volume adjustment	LOUDNESS
When this control is turned out of its FLAT position the highest and lowest frequencies at low volumes are amplified a bit more than the rest in order to compensate the smaller sensitivity of the human ear for low volumes in these ranges. When turned to the position MAX this effect reaches its maximum, in the position FLAT the function is eliminated completely.	
8. Volume control	VOLUME
With this control you set the total volume.	
9. Phono key	PHONO
You press this key if you want to replay disks on a record player connected to the outlets 23 or 25.	
10. Tuner key	TUNER
For radio reception via a radio receiver (tuner) connected to the outlets 28 you press this key.	
11. CD key	CD
For replay from a compact disk player connected to the outlets 27 you press this key.	
12. Key for additional program source	AUX
For replay from a program source connected to the outlets 26 you press this key.	
13. Phono selector switch	PHONO MC
For replay from a record player with a so-called moving coil system this key must be pressed.	
14. Mute key	MUTE
When this key is pressed the volume is reduced considerably.	
15. Operation mode selector	MONO
With this key you select one of the modes stereo (key not pressed) or mono (key pressed), respectively.	
16. Noise filter	HI FILTER
You press this key to suppress disturbances in the upper frequency range (noise etc.).	
17. Rrrmble filter	SUBSONIC
For suppressing noises in the lowest frequency ranges (caused by wavy disks etc.) you press this key.	
18. Selector switch for treble control	TURNOVER TREBLE
With this switch you select the starting frequency of the treble control.	
19. Selector switch for bass control	TURNOVER BASS
With this switch you select the starting frequency of the bass control.	
20. On/off switch for sound control	SOURCE DIRECT
When this key is pressed the sound controls 2 and 3 are not active.	
21. Headphone outlet	PHONES
You can connect stereo headphones provided with a suitable plug to this outlet.	
22. Capacity selector switch	PHONO CAPACITIY TRIM
With this switch you can set the unit to the capacity recommended by the manufacturer of your pick-up system.	

BLOCK DIAGRAM

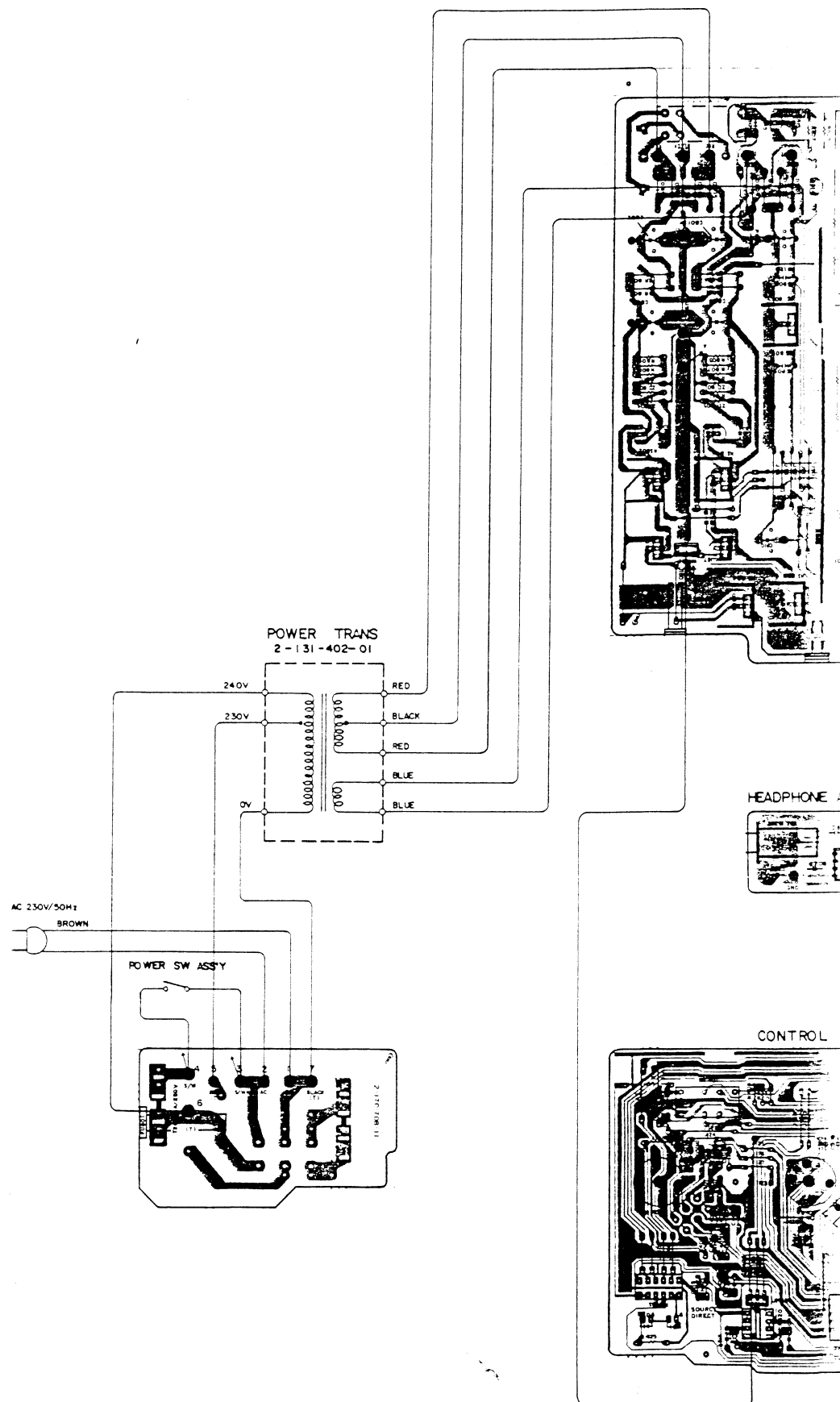


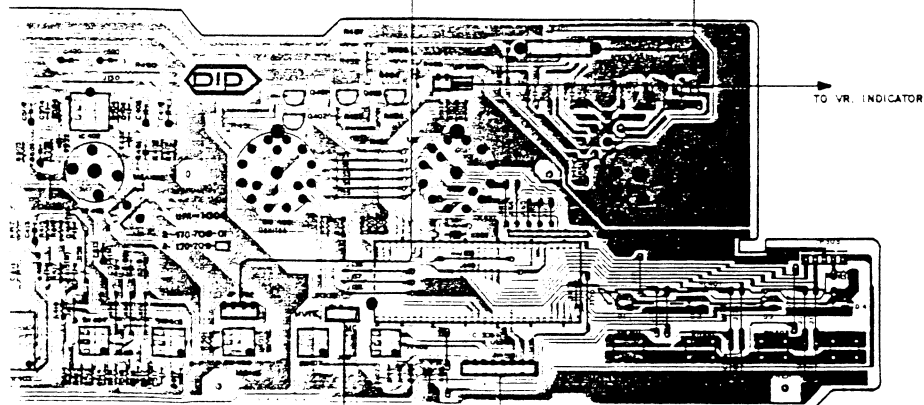
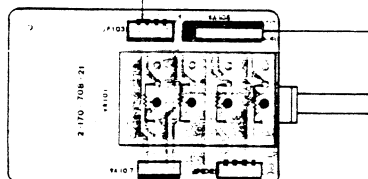
SCHEMATIC DIAGRAM



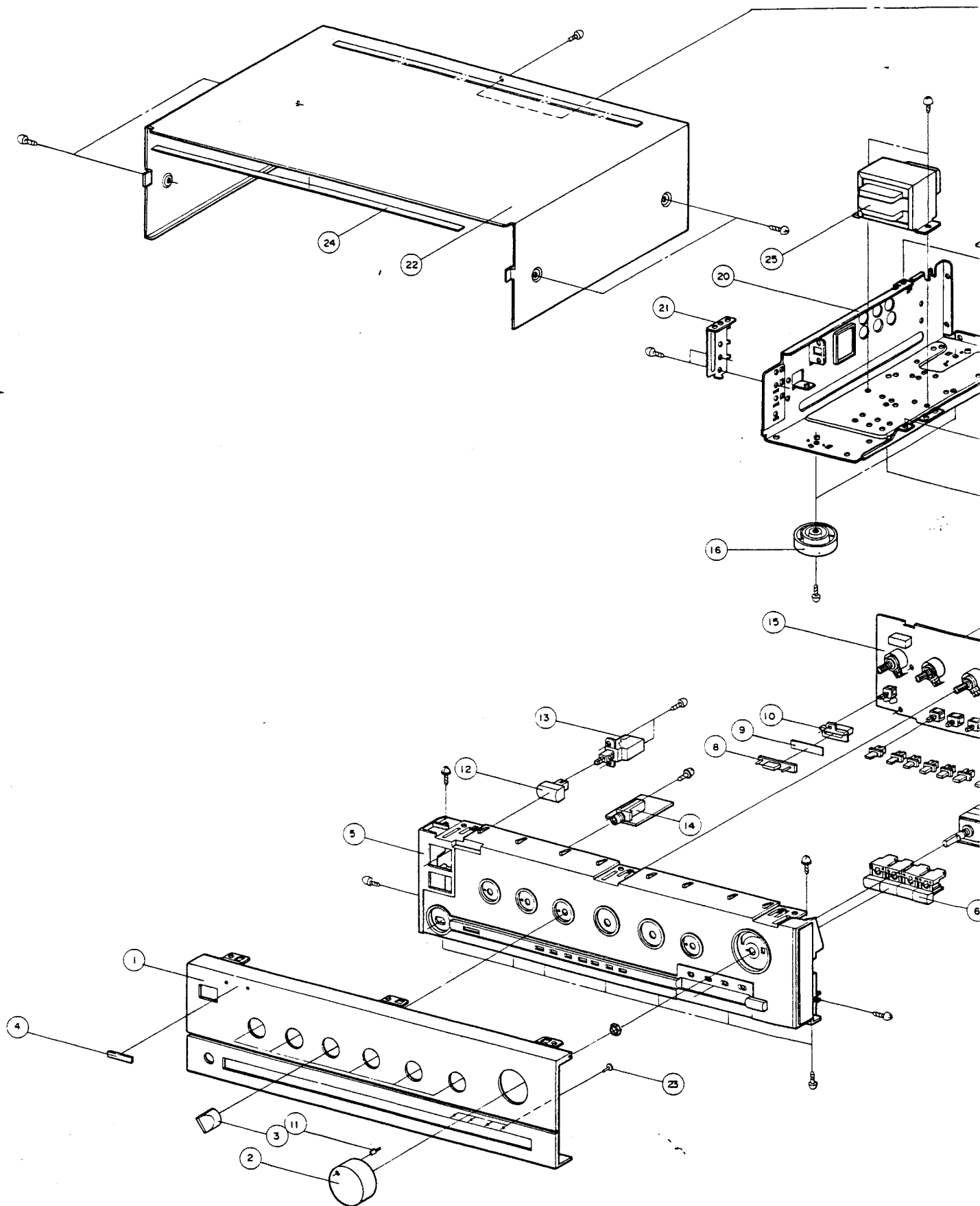


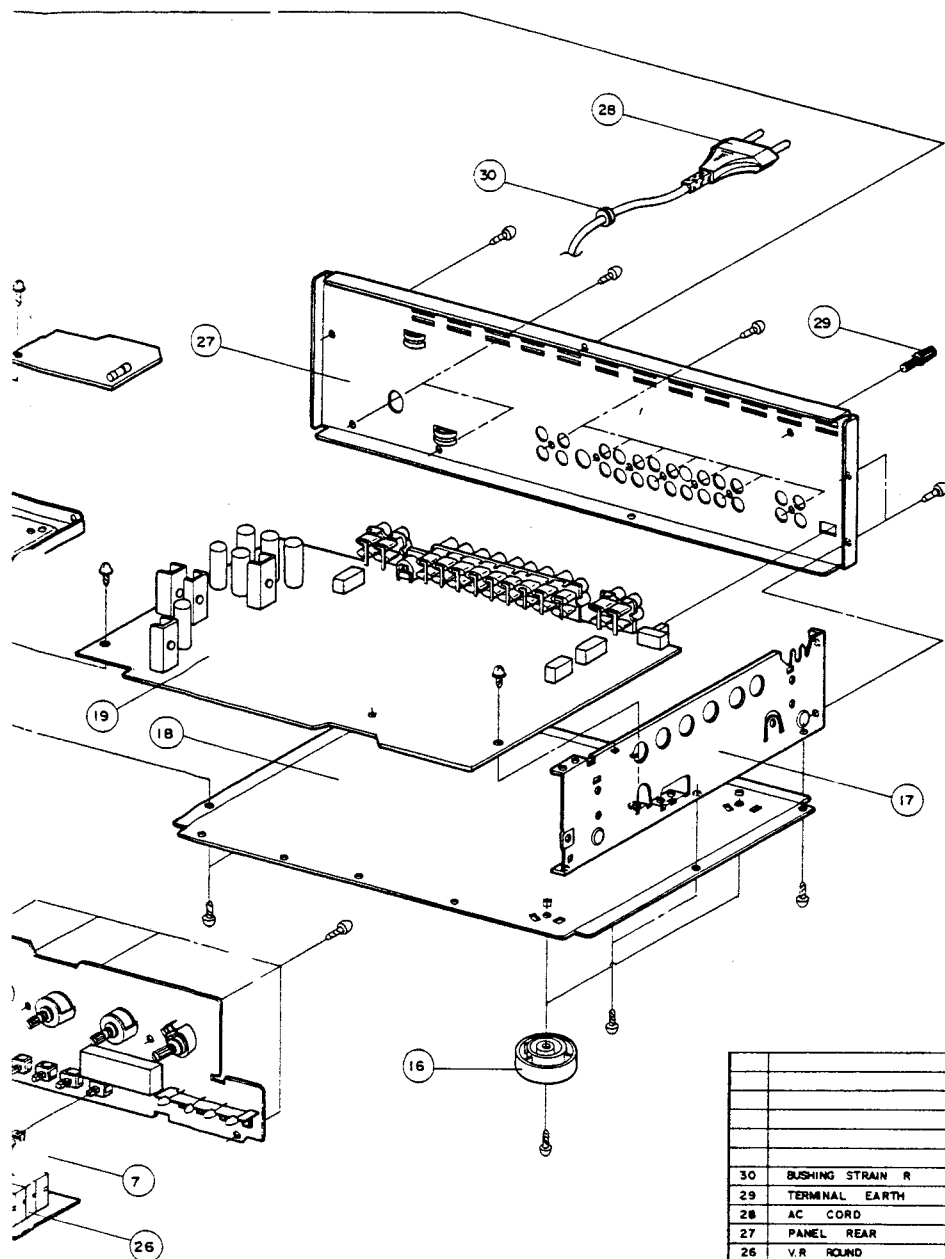
WIRING DIAGRAM





EXPLODED VIEW





NO.	PARTS NAME	PARTS NO.	MATERIAL	QTY
30	BUSHING STRAIN R	8-201-115-01		1
29	TERMINAL EARTH	2-155-747-01		1
28	AC CORD	2-211-109-02		1
27	PANEL REAR	3-121-003-01	SECC	1
26	V.R. ROUND	2-501-349-01		1
25	TRANS POWER	2-131-402-01		1
24	FELT BLACK GRILL	3-730-116-01	FELT	2
23	LENS	3-116-106-01	ACRYL	4
22	CASE BONNET	3-121-007-01	SECC + PVC	1
21	PANEL BRK'T	3-116-117-02	SECC	1
20	FRAME SIDE L	3-121-010-01	SECC	1
19	PCB UNIT ASS'Y	A-170-708-01		1
18	BOTTOM PLATE	3-121-008-01	SECC	1
17	FRAME SIDE R	3-121-009-01	SECC	1
16	FOOT ASS'Y	3-120-621-01	HIPS + TPR	4
15	PCB UNIT ASS'Y	A-170-709-01		1
14	JACK HEADPHONE	2-155-616-01		1
13	S/W PUSH	2-202-210-01		1
12	KNOB POWER	3-214-504-01	ABS	1
11	LED	2-419-041-31		1
10	KNOB BASE	3-120-609-01	ABS	1
9	FILTER DIRECT	3-120-624-01	PE FILM	1
8	KNOB DIRECT	3-120-606-01	ACRYL	1
7	KNOB PUSH	3-120-606-01	ABS	7
6	KNOB STATION	3-214-602-01	ABS	1
5	BASE PANEL	3-121-002-01	ABS	1
4	BADGE	3-120-622-01	AD70-P	1
3	KNOB ROTARY	3-120-604-01	ABS	6
2	KNOB VOLUME	3-120-616-01	ABS	1
1	PANEL FRONT	3-121-001-01	ABS3-TS	1